

SEQ ID NO	Sequence
1	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKQKRY
2	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKQKRY
3	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKQK
4	Ac-HTEAVFTDQYTRLRKQVAAKKYLQSIKQKRY
5	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKQGGT
6	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKQKR
7	Ac-HSDAVFTDQYTRLRKQLAAKKYLQTIKQKRY
8	Ac-HSDAVFTDQYTRLRKQMAAKKYLQTIKQKRY
9	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKQKRY
10	Ac-HSDAVFTDQYTRLRKQMAAKHYLQSIKQKRY
11	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKQKR
12	Ac-HSDAVFTDQYTRLRKQMAKKYLQSIKQKR
13	Ac-HSDAVFTDQYTRLRKQMARKKYLQSIKQKR
14	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKQKR
15	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQPKR
16	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQQKR
17	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKR
18	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQRR
19	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKA
20	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKF
21	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKH
22	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKI
23	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKK
24	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKL
25	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKM
26	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKP
27	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKQ
28	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKS
29	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKT
30	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKV
31	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKW
32	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQKY
33	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIQORI
34	Ac-HSDAVFTDQYTRLRKQMAKKKYLQSIQORI
35	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIQORI
36	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQORI
37	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIQORI

FIG. 1a

SEQ ID NO	Sequence
38	Ac-HSDAVFTDNYTLRKQVAAKKYLQSIKQKRY
39	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKRY
40	Ac-HSDAVFTDNYTLRKQVAAKKYLQSIKQK
41	Ac-HTEAVFTDNYTLRKQVAAKKYLQSIKQKRY
42	Ac-HSDAVFTDNYTLRKQLAVKKYLQDIKQGGT
43	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKR
44	Ac-HSDAVFTDNYTLRKQLAAKKYLQTIKQKRY
45	Ac-HSDAVFTDNYTLRKQMAAKKYLQTIKQKRY
46	Ac-HSDAVFTDNYTLRKQMAAHKYLQSIKQKRY
47	Ac-HSDAVFTDNYTLRKQMAAKHYLQSIKQKRY
48	Ac-HSDAVFTDNYTLRKQMAGKKYLQSIKQKR
49	Ac-HSDAVFTDNYTLRKQMAKKKYLQSIKQKR
50	Ac-HSDAVFTDNYTLRKQMARKKYLQSIKQKR
51	Ac-HSDAVFTDNYTLRKQMASKKYLQSIKQKR
52	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKR
53	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQQR
54	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKR
55	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQRR
56	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKA
57	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKF
58	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKH
59	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKI
60	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKK
61	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKL
62	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKM
63	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKP
64	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKQ
65	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKS
66	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKT
67	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKV
68	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKW
69	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQKY
70	Ac-HSDAVFTDNYTLRKQMAGKKYLQSIQRI
71	Ac-HSDAVFTDNYTLRKQMAKKKYLQSIQRI
72	Ac-HSDAVFTDNYTLRKQMASKKYLQSIQRI
73	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQRI
74	Ac-HSDAVFTDNYTLRKQMASKKYLQSIQRI

FIG. 1b

SEQ ID NO	Sequence
75	Ac-HSDAVFTDQYTRLRKQVAACKYLQSIKNKRY
76	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIKNKRY
77	Ac-HSDAVFTDQYTRLRKQVAACKYLQSIKNK
79	Ac-HTEAVFTDQYTRLRKQVAACKYLQSIKNKRY
80	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKNGGT
81	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIKNKR
82	Ac-HSDAVFTDQYTRLRKQLAAKKYLQTIKNKRY
83	Ac-HSDAVFTDQYTRLRKQMAACKYLQTIKNKRY
84	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKNKRY
85	Ac-HSDAVFTDQYTRLRKQMAAKHYLQSIKNKRY
86	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKNKR
87	Ac-HSDAVFTDQYTRLRKQMAKKYLQSIKNKR
88	Ac-HSDAVFTDQYTRLRKQMARKKYLQSIKNKR
89	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKNKR
90	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI PNKR
91	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI QNKR
92	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI RNKR
93	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNRR
94	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKA
95	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKF
96	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKH
97	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKI
98	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKK
99	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKL
100	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKM
101	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKP
102	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKQ
103	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKS
104	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKT
105	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKV
106	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKW
107	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI KNKY
108	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKNRI
109	Ac-HSDAVFTDQYTRLRKQMAKKYLQSIKNRI
110	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKNRI
111	Ac-HSDAVFTDQYTRLRKQMAACKYLQSI PNRI
112	Ac-HSDAVFTDQYTRLRKQMASKKYLQSI RNRI

FIG. 1c

SEQ ID NO	Sequence
113	Ac-HSDAVFTDQYTRLRKQVAACKYLQSIKQKRYC-PEG
114	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIKQKRYC-PEG
115	Ac-HSDAVFTDQYTRLRKQVAACKYLQSIKQKC-PEG
116	Ac-HTEAVFTDQYTRLRKQVAACKYLQSIKQKRYC-PEG
117	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKQGGTC-PEG
118	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIKQKRC-PEG
119	Ac-HSDAVFTDQYTRLRKQLAACKYLQTIKQKRYC-PEG
120	Ac-HSDAVFTDQYTRLRKQMAACKYLQTIKQKRYC-PEG
121	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKQKRYC-PEG
122	Ac-HSDAVFTDQYTRLRKQMAAKHYLQSIKQKRYC-PEG
123	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKQKRC-PEG
124	Ac-HSDAVFTDQYTRLRKQMAKKKYLQSIKQKRC-PEG
125	Ac-HSDAVFTDQYTRLRKQMARKKYLQSIKQKRC-PEG
126	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKQKRC-PEG
127	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKRC-PEG
128	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKRC-PEG
129	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKRC-PEG
130	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQORRC-PEG
131	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKAC-PEG
132	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKFC-PEG
133	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKHC-PEG
134	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKIC-PEG
135	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKKC-PEG
136	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKLC-PEG
137	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKMC-PEG
138	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKPC-PEG
139	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKQC-PEG
140	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKSC-PEG
141	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKTC-PEG
142	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKVC-PEG
143	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKWC-PEG
144	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQKYC-PEG
145	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIQORIC-PEG
146	Ac-HSDAVFTDQYTRLRKQMAKKKYLQSIQORIC-PEG
147	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIQORIC-PEG
148	Ac-HSDAVFTDQYTRLRKQMAACKYLQSIQORIC-PEG
149	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIQORIC-PEG

FIG. 1d

SEQ ID NO	Sequence
150	HSDGIFTDSYSRYRKQMAVKKYLA AVL GKRYKQ RVKNK
151	HSDGIFTDSYSRYRKQMAVKKYLA AVL
152	HSDAVFTDNYTRLRKQMAVKKYLNSILN
153	HSDAVFTDQYTRLRKQVAAKKYLQSIKQKRY
154	Ac-HTDAVFTDQYTRLRKQVAAKKYLQSIKQKRY
155	HSDAVFTDQYTRLRKQVAAKKYLQSIKQKRYC-PEG
156	Ac-HTDAVFTDQYTRLRKQVAAKKYLQSIKQKRYC-PEG

FIG. 1e

Stability against DPP IV Cleavage

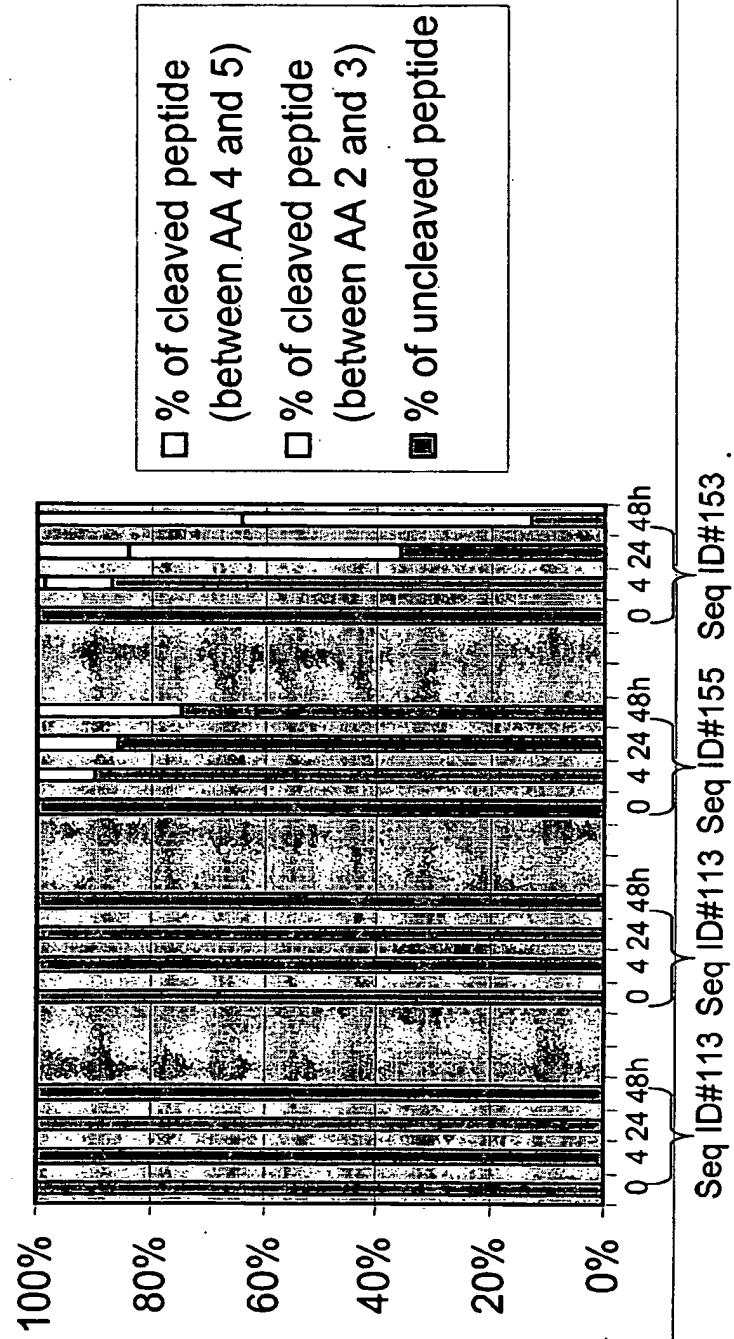
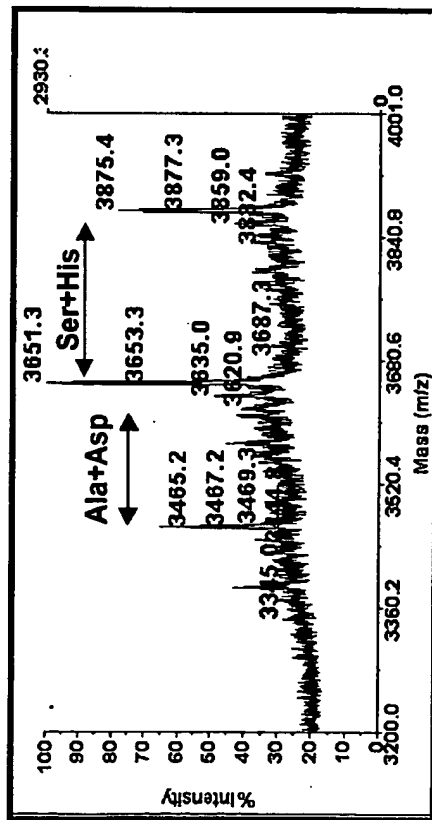
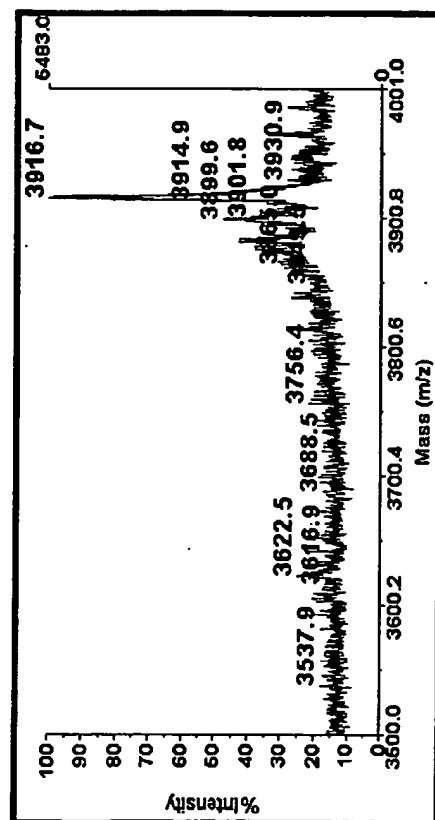


Figure 2a



**SEQ ID #153 is
cleaved by DPPIV.**



**SEQ ID#1 is not
cleaved
by DPPIV.**

Figure 2b

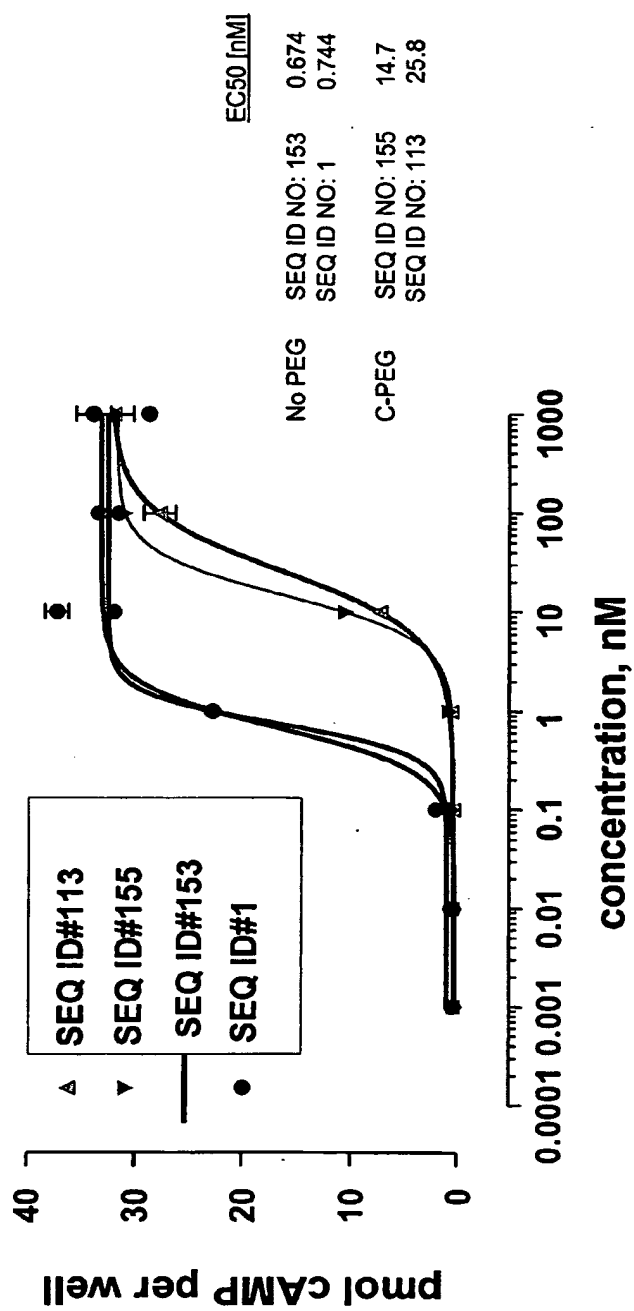


Figure 3

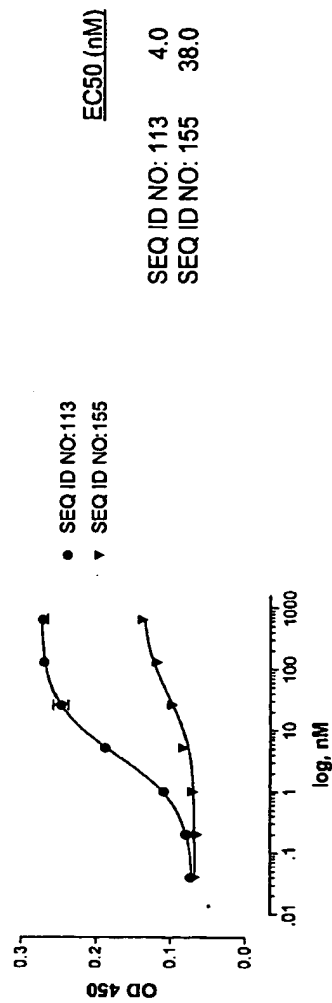
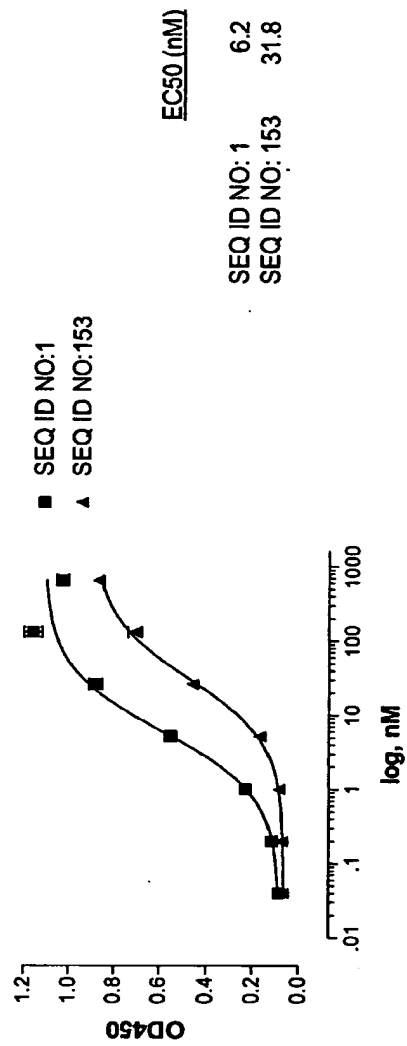
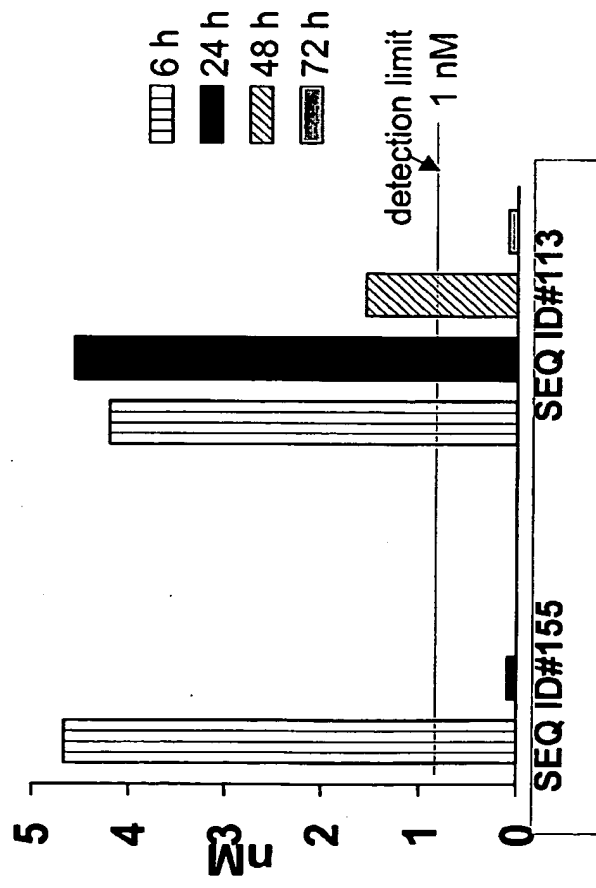


Figure 4



	6 hrs.	24 hrs.	48 hrs.	72 hrs.
SEQ ID#155	4.66±0.43	< 1	< 1	< 1
SEQ ID#113	4.21±0.25	4.57±0.37	1.56±0.12	< 1

Figure 5a

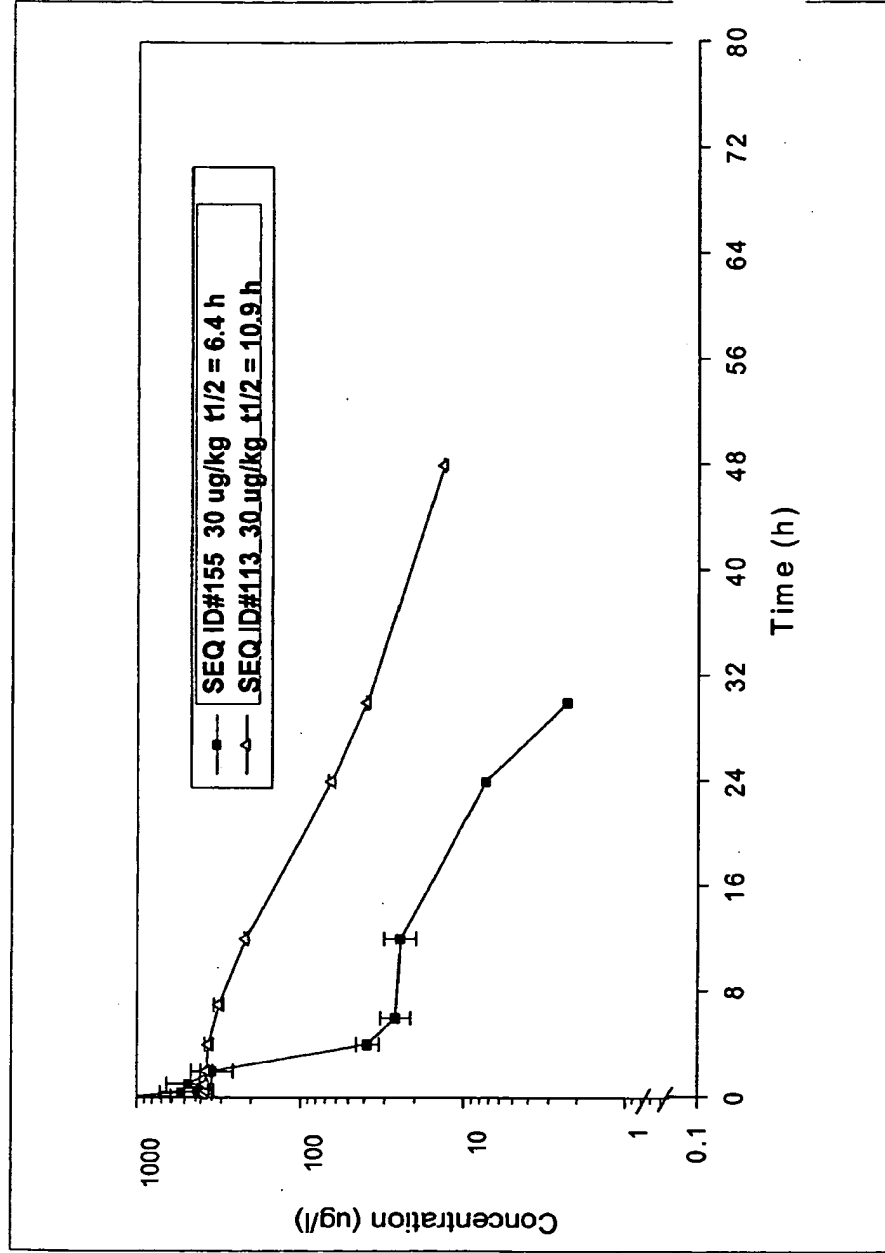


Figure 5b

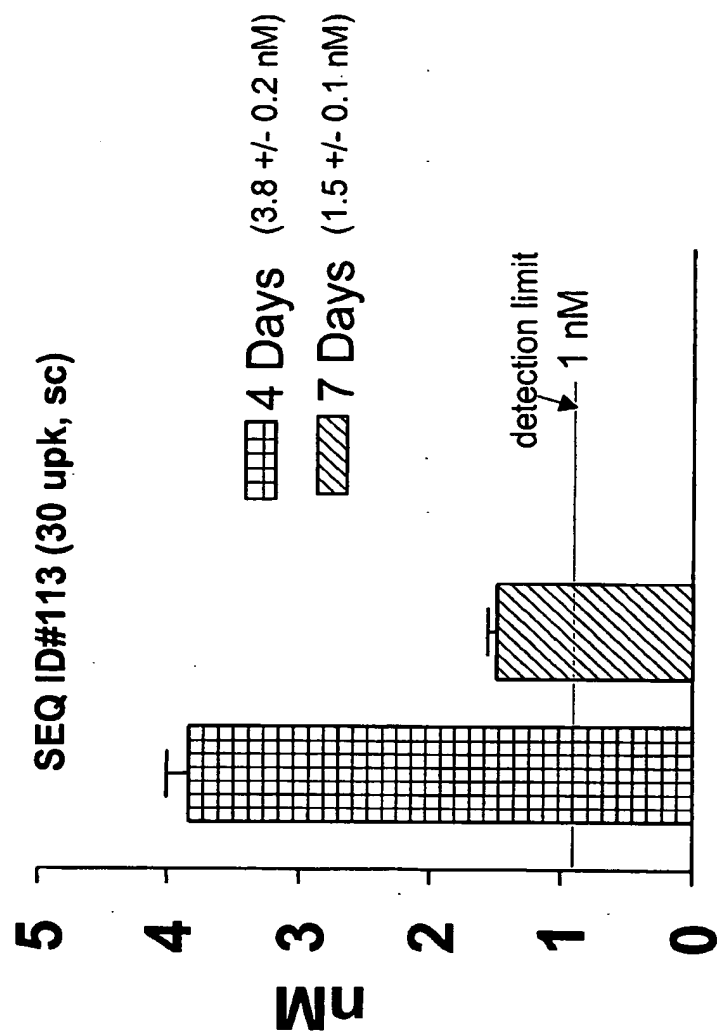


Figure 5c

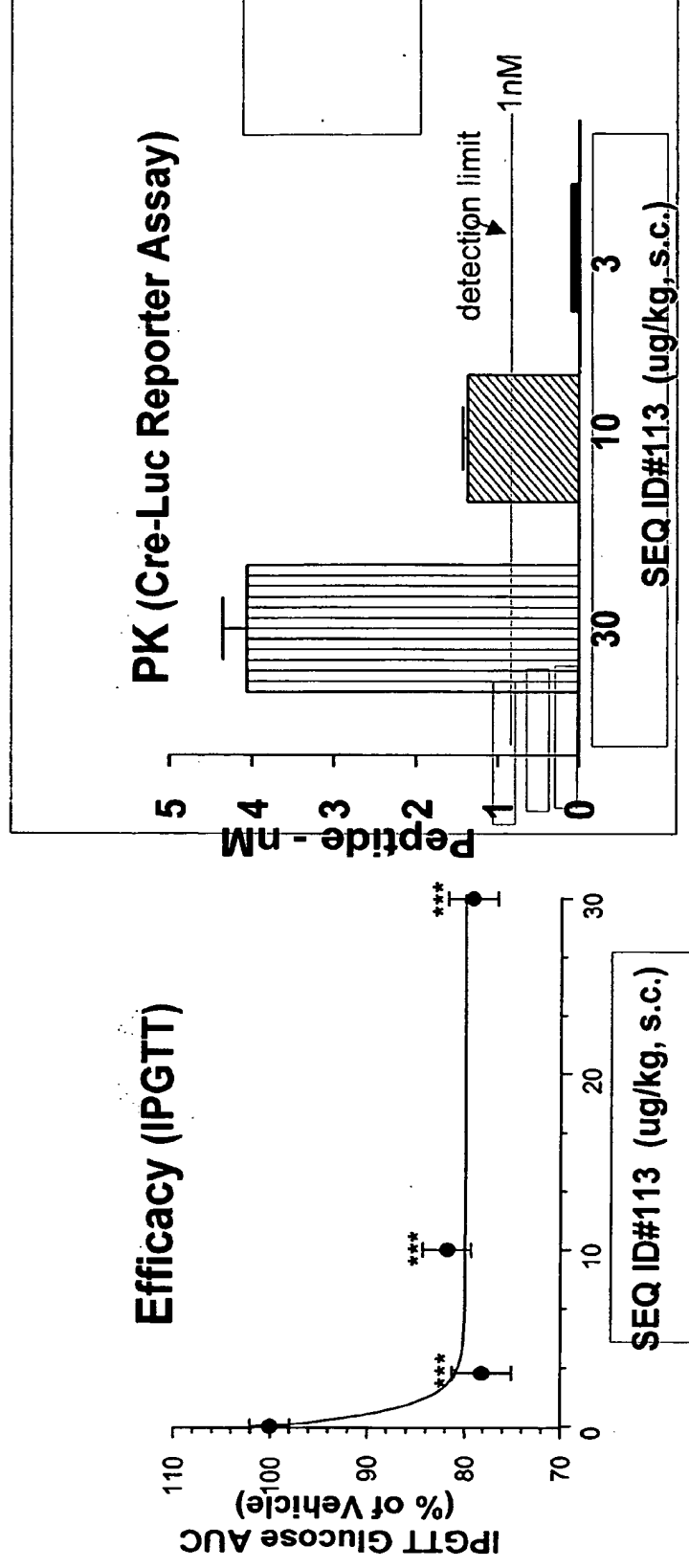


Figure 6a

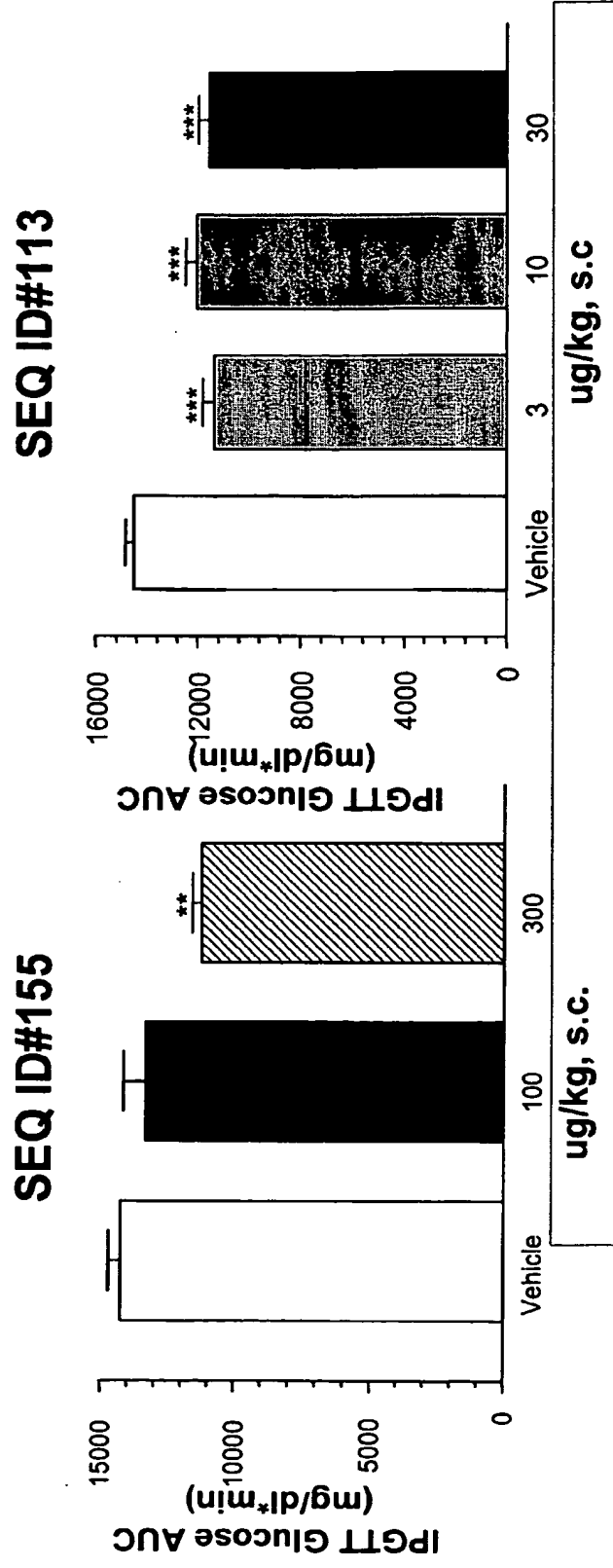
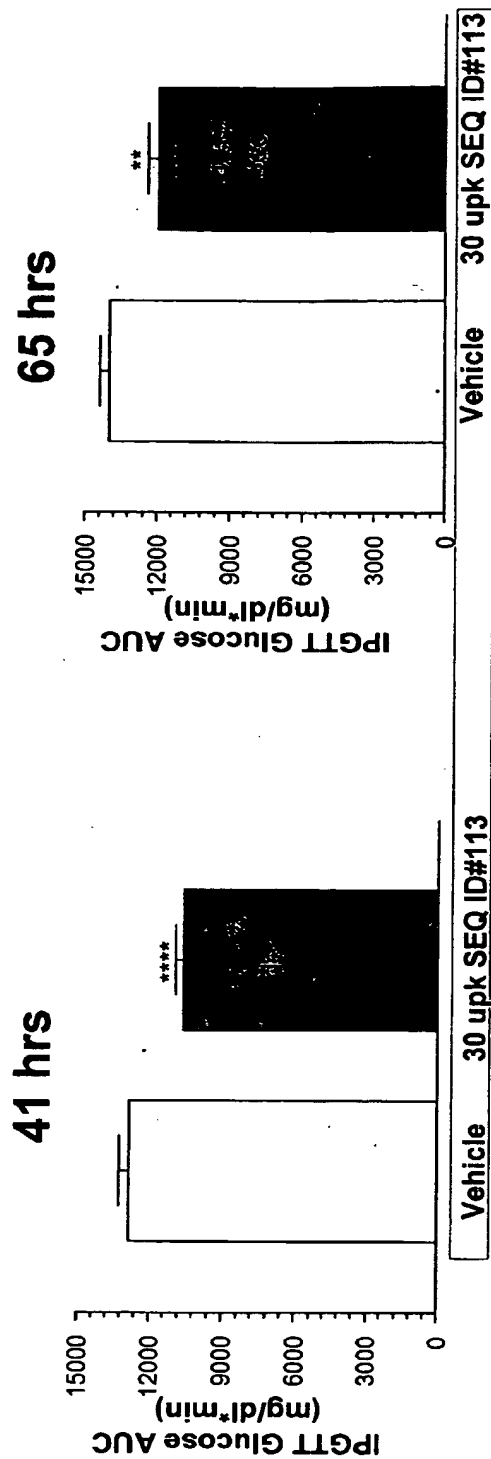


Figure 6b



SEQ ID#113	24 hrs.	41 hrs.	65 hrs.
	20±3*	17±2*	14.5±3*

Figure 6c